



**6712-01**

**FEDERAL COMMUNICATIONS COMMISSION**

**47 CFR Parts 1 and 90**

**[WP Docket No. 07-100; FCC 20-137; FRS 17146]**

**4.9 GHz Band**

**AGENCY:** Federal Communications Commission.

**ACTION:** Final rule.

**SUMMARY:** In March 2018, the Federal Communications Commission (Commission) released a Sixth Further Notice of Proposed Rulemaking (Sixth FNPRM) seeking comment on ways to stimulate expanded use of and investment in the 4.9 GHz (4940-4990 MHz) band, including allowing licensees the flexibility to engage in spectrum leasing and broadening existing eligibility requirements. On September 8, 2020, the Public Safety and Homeland Security Bureau and the Wireless Telecommunications Bureau issued a Public Notice freezing the 4.9 GHz band to stabilize it while the Commission considered changes to the 4.9 GHz band rules (Freeze Public Notice). In this document, the Commission adopts rules permitting one statewide 4.9 GHz band licensee per state, the State Lessor, to lease some or all of its spectrum rights to third parties—including commercial and public safety users—in those states that the Commission has not identified as a diverter of 911 fees. The Report and Order does not limit or modify the rights of any incumbent public safety licensees. The new rules also eliminate the requirement that leased spectrum must be used to support public safety but requires lessees to adhere to the informal coordination requirements applicable to the band.

**DATES:** Effective [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER], except for § 90.1217, which is delayed. We will publish a document in

the Federal Register announcing the effective date.

**ADDRESSES:** Federal Communications Commission, 45 L St NE, SW, Washington, DC 20554.

**FOR FURTHER INFORMATION CONTACT:** Jonathan Markman of the Wireless Telecommunications Bureau, Mobility Division, at (202) 418-7090 or Jonathan.Markman@fcc.gov. For information regarding the PRA information collection requirements contained in this PRA, contact Cathy Williams, Office of Managing Director, at (202) 418-2918 or Cathy.Williams@fcc.gov.

**SUPPLEMENTARY INFORMATION:** This is a summary of the Commission's Report and Order in WP Docket No. 07-100, FCC 20-137 adopted September 30, 2020 and released October 02, 2020. The full text of the Report and Order, including all Appendices, is available by downloading the text from the Commission's website at <https://www.fcc.gov/document/fcc-expands-access-and-investment-49-ghz-band-0>. Alternative formats are available for people with disabilities (Braille, large print, electronic files, audio format), by sending an e-mail to FCC504@fcc.gov or calling the Consumer and Governmental Affairs Bureau at (202) 418-0530 (voice), (202) 418-0432 (TTY).

The Commission will send a copy of this Report in a report to be sent to Congress and the Government Accountability Office pursuant to the Congressional Review Act, see 5 U.S.C. 801(a)(1)(A).

### **Final Regulatory Flexibility Analysis**

The Regulatory Flexibility Act (RFA) requires that an agency prepare a regulatory flexibility analysis for notice and comment rulemakings, unless the agency certifies that "the rule will not, if promulgated, have a significant economic impact on a substantial number of small

entities.” Accordingly, the Commission has prepared a Final Regulatory Flexibility Analysis (FRFA) concerning the possible impact of the rule changes contained in this Report and Order on small entities. As required by the Regulatory Flexibility Act of 1980, as amended (RFA), an Initial Regulatory Flexibility Analysis (IRFA) was incorporated in the Sixth Further Notice of Proposed Rulemaking (Sixth FNPRM) released in March 2018 in this proceeding (83 FR 20011, May 7, 2018). The Commission sought written public comment on the proposals in the Sixth FNPRM, including comments on the IRFA. No comments were filed addressing the IRFA. This present Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.

### **Paperwork Reduction Act**

The requirements in §90.1217 constitute new or modified collections subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104-13. They will be submitted to the Office of Management and Budget (OMB) for review under section 3507(d) of the PRA. OMB, the general public, and other Federal agencies are invited to comment on the new or modified information collection requirements contained in this proceeding. In addition, the Commission notes that, pursuant to the Small Business Paperwork Relief Act of 2002, Pub. L. 107-198, see 44 U.S.C. 3506(c)(4), the Commission previously sought, but did not receive, specific comment on how the Commission might further reduce the information collection burden for small business concerns with fewer than 25 employees. The Commission describes impacts that might affect small businesses, which includes more businesses with fewer than 25 employees, in the Final Regulatory Flexibility Analysis.

### **Congressional Review Act**

The Commission has determined and the Administrator of the Office of Information and Regulatory Affairs, Office of Management and Budget, concurs, that this rule is non-major under

the Congressional Review Act, 5 U.S.C. 804(2). The Commission will send a copy of the Sixth Report and Order in a report to be sent to Congress and the Government Accountability Office pursuant to the Congressional Review Act, see 5 U.S.C. 801(a)(1)(A).

## **Synopsis**

### **I. INTRODUCTION**

1. Nearly two decades ago, the Commission designated 50 megahertz of spectrum at 4.9 GHz (4940-4990 MHz) for use in support of public safety. Over the past 18 years, the Commission, working with public safety entities and associations, has endeavored to increase investment in, and maximize use of, the band. These efforts notwithstanding, the 4.9 GHz band remains underused outside of major metropolitan areas, with stakeholders citing high equipment costs and limited availability of broadband equipment, among several barriers to its use. In this document, we begin to break down these barriers and expand access to the band by providing states the opportunity to lease 4.9 GHz band spectrum to commercial entities, critical infrastructure industry, including electric utilities, and other stakeholders.

2. Under our new framework, statewide incumbent licensees will be empowered with the authority to make decisions on how best to maximize the value and use of their spectrum based on market forces. States can continue to use the spectrum for their own public safety network operations; they can enter into one or more commercial arrangements for commercial deployment of public-safety communications services; they can lease the spectrum to a commercial service provider for deployment of mobile or fixed wireless Internet service, private land mobile radio service or critical infrastructure connectivity; or they can pursue a combination of any of these scenarios (or any other arrangement that is allowed for pursuant to the service rules for the band and our Secondary Markets rules (69 FR 77521, Dec. 27, 2004)).

The rule changes we adopt here will reverse the effects of the 4.9 GHz band's antiquated licensing framework that have led to its underuse.

3. Prior to the amendments in this document, access to the 4.9 GHz band was restricted to certain entities and use of the spectrum was limited to public safety purposes. Licensees also operate pursuant to a complicated sharing framework; there is no exclusive use of the band. This Sixth Report and Order allows states to enter into lease agreements voluntarily with other users (whether public safety or non-public safety) for access to the 4.9 GHz band in their territory. We place no restriction on the type of entity to which a state can lease or the type of services that the lessee can provide. This approach, especially when combined with the potential changes to licensing and coordination contemplated in the accompanying Seventh FNPRM, published elsewhere in this issue of the Federal Register, seeks to empower states to determine the best use of the 4.9 GHz band for their citizens, by enabling them to balance the needs of public safety and the benefits that can come from non-public safety use. We anticipate that this framework will facilitate more robust investment in this band across the entire country and drive down equipment costs, to the benefit of public safety and non-public safety entities seeking to deploy.

4. In the accompanying Seventh FNPRM, we propose a new state-based licensing regime for public safety operations in the 4.9 GHz band. We seek comment on a centralized structure of state oversight and coordination of public safety operations in the band, to work alongside the leasing regime we adopt in this document. We also seek comment on ways to maximize opportunities for leasing and otherwise encourage more robust use of this band.

## **II. BACKGROUND**

5. Under our rules, to be eligible for a 4.9 GHz license, an entity must provide public

safety services as defined under our part 90 rules. This includes state and local government entities, as well as nongovernmental organizations (NGOs) that operate their systems solely to transmit communications essential to the provision of services having the sole or principal purpose of protecting the safety of life, health or property. Licensees are also permitted to enter into sharing agreements with ineligible entities for use of this spectrum, but operations must be in support of public safety. 4.9 GHz licenses authorize operation on any channel over the entire 50 megahertz of the band and are issued for the geographic area encompassing the legal jurisdiction of the licensee. A key component of the 4.9 GHz band is that licenses are granted for shared use only and provide no exclusive rights. As a result, licenses often overlap: there may be one or more geographic area license covering a given location and licensed on the same spectrum, as well as fixed-site licenses. For example, a common scenario might involve a statewide license held by the state police, a county-wide license held by the sheriff's department, and fixed-site licenses operating in the same area by various public safety entities. Our 4.9 GHz rules do not specify a formal coordination requirement. Rather, licensees informally cooperate with one another to ensure that their operations do not cause interference with one another, and to resolve interference if it occurs. Public safety entities can also be licensed for fixed point-to-point and point-to-multipoint operations within their jurisdictions.

6. Nearly all licenses in this band contain a condition, consistent with our rules, specifying that operation is permitted only within the jurisdiction of the licensee, or that of the entity supporting the application of an NGO, regardless of the area specified on the license (which, due to legacy Universal Licensing System limitations, in some cases is depicted as larger than the relevant jurisdiction). A licensee has the authority to operate base stations and mobile units (including portables and handheld units) and/or temporary (one year or less) fixed stations

anywhere within its authorized area.

7. Licensees are also permitted to operate base stations with mobile units and temporary fixed stations outside their authorized area with the permission of the other jurisdiction in which they will operate. Permanent fixed point-to-point and point-to-multipoint stations must be licensed individually on a site-by-site basis. Permanent fixed stations that connect base and mobile stations that are used to deliver broadband, or that are part of a public safety network using spectrum designated for broadband use, are accorded "primary" status under the rules.

8. There are 3,578 licenses currently issued in the band. This includes 142 statewide area licenses, 1,160 countywide area licenses, and 2,276 other licenses, either for geographic area licenses or other types (such as for a group of counties, a city, or parts of one or more cities) or for fixed sites. Most of the United States and U.S. territories are covered by at least one statewide license. In some states, multiple state entities hold statewide licenses. Operations, particularly fixed communications and connectivity, are used to facilitate video streaming, communications system backhaul, and data connections for advanced devices. Emerging uses of the band include robotics and airborne operations, as well as Internet of Things uses.

9. In March 2018, the Commission released the Sixth FNPRM, in which it sought comment on ways to stimulate expanded use of, and investment in, the 4.9 GHz band. The Commission noted that “[a]lthough nearly 90,000 public safety entities are eligible under our rules to obtain licenses in the band, there were only 2,442 licenses in use in 2012 and only 3,174 licenses in use nearly six years later in 2018.” With no more than 3.5% of potential licensees using the band, the Commission remained concerned that, as originally stated in 2012, the band has “fallen short of its potential.” Over two years later, the 4.9 GHz band continues to be

underused. There are currently only 3,578 licenses issued, and in many instances the same licensee holds multiple licenses in its jurisdiction based on the 4.9 GHz licensing structure requiring geographic area licensees to obtain individual licenses for permanent fixed sites. Accordingly, there are currently only 2,094 individual licensees, whereas the number of eligible public safety entities as of the 2017 census is 90,075. Various commenters agree that the 4.9 GHz band remains underused. As one commenter noted, the lack of widespread use of the band “stands in stark contrast to other spectrum bands in which usage is increasing exponentially and the Commission is working at breakneck speed to provide access to support existing broadband services and provide opportunities for new services and applications.”

10. In the Sixth FNPRM, the Commission sought comment on a number of proposed rule changes and several options to increase use of this spectrum. These included allowing licensees additional flexibility to engage in spectrum leasing, as well as broadening of eligibility requirements for licensees, changes to technical rules governing the band, and proposals from NPSTC and APCO seeking revisions to the band’s coordination requirements and band plan. The Commission received comments from across several industries, which broadly support increased use of the band while also preserving public safety access.

11. On September 8, 2020, the Public Safety and Homeland Security Bureau and the Wireless Telecommunications Bureau (the Bureaus) issued a freeze of the 4.9 GHz band to stabilize the band while we consider changes to the rules as part of this proceeding (Freeze Public Notice) (85 FR 63553, Oct. 8, 2020). Pursuant to the freeze, we will not accept applications for new or modified licenses, either geographic area licenses or individual fixed-site licenses.

### **III. SIXTH REPORT AND ORDER**

12. In the Sixth FNPRM, the Commission anticipated that “the benefits of allowing more efficient spectrum use through leasing can be realized at no cost to public safety.” This Commission has consistently worked to ensure the efficient allocation and use of spectrum, especially critical mid-band spectrum. In this Sixth Report and Order, we revise a legacy framework and put the 4.9 GHz band, which has been underused for nearly 20 years, on a market-driven path. Our approach will allow public safety incumbents to retain access to the band while also providing incentives for more efficient use by empowering states to lease spectrum rights to commercial, critical infrastructure, and other users. The rules we adopt in this document give public safety licensees the agency to execute leasing arrangements when appropriate and beneficial to their citizens without requiring modification or cessation of current public safety operations in the band. We find that allowing state-based leasing under the framework adopted in this document serves the public interest.

#### **A. Public Interest Benefits of Allowing 4.9 GHz Licensees to Lease Spectrum**

13. We find that allowing leased access to the shared 4.9 GHz band for non-public safety operations will increase the efficient use of this spectrum and serve the public interest. We will permit one statewide 4.9 GHz band licensee in each state to lease some or all of its spectrum rights to third parties and, when leased, we eliminate the requirement that 4.9 GHz spectrum must be used to support public safety. This light-touch approach will allow each state the flexibility to negotiate mutually agreeable arrangements with third party lessees where it makes sense to do so, which we anticipate will increase use of and investment in the band. This approach also protects against harmful interference by leveraging the existing informal coordination process in the 4.9 GHz band and ensuring that leasing will be coordinated by a

single state entity that is able to work with county and local public safety entities, as well as lessees, to avoid harmful interference.

14. Commenters support varying ways of allowing non-public safety access to the band. Commenters representing CII indicate that this spectrum is well-suited for complex operations, including smart grid applications and other communications networks upon which utilities and other CII entities rely. Providers of fixed wireless broadband service similarly argue that the spectrum holds promise for their operations, including point-to-multipoint connections. Equipment manufacturers and spectrum consultants also support non-public safety use of the band. Some parties contend that spectrum sharing can be achieved using dynamic access systems, similar to those used in the TV white spaces, Citizens Broadband Radio Service, or for unlicensed operations in the 6 GHz band (5950-7150 MHz). Commenters representing 4.9 GHz public safety users urge the Commission to ensure that current and future public safety operations have continued access to this band.

15. In the nearly two decades since, the Commission adopted restrictive leasing rules for public safety eligibles, the utility of this spectrum for flexible use has increased dramatically, and the public safety community still has not made full use of the entire band. In addition, some countries have considered, or are considering, allocating this band for 5G; successful international harmonization efforts could provide further advantages in the availability and price of equipment, thus potentially increasing its utility for flexible use. Given these developments, the public interest would be served by adopting a more flexible approach that permits leasing of the spectrum to non-public safety entities. We conclude, as suggested in the Sixth FNPRM, that “the benefits of allowing more efficient spectrum use through leasing can be realized at no cost to public safety.” We agree with commenters that allowing a “secondary market for spectrum in

this band. . . [will] augment the Commission’s efforts to intensify use of the band” and “provide for creativity in use cases.”

16. We determine that allowing leasing of shared 4.9 GHz spectrum by a single state government entity per state best serves the public interest by encouraging greater use of the band and allowing each state to determine the correct balance between public safety and non-public safety access, thereby avoiding disruptions to public safety operations. We expect that this action ultimately will decrease deployment barriers and encourage greater public safety use of the band, alongside non-public safety uses, by driving down the price of equipment and facilitating innovative cost-sharing arrangements between public safety licensees and non-public safety lessees. The potential revenue streams from leasing may also increase the ability of states to invest in equipment for this band. While we seek to maximize leasing opportunities, we find that the unique nature of this band and the realities of a shared spectrum environment necessitate more centralized control of non-public safety spectrum access. We believe that allowing leasing through a single statewide entity in each state provides the flexibility to determine the most appropriate use of its spectrum rights to meet the state’s communications needs, while ensuring that access to this shared band is controlled and responsibly managed. This approach both promotes more efficient spectrum use and encourages greater spectrum access.

17. Some commenters raise concerns about spectrum leasing, including general concerns about Commission action forcing public safety to share the 4.9 GHz band or transferring spectrum and decreasing the availability of public safety spectrum, leasing to non-public-safety entities, and more specific concerns about states leasing at the expense of local public safety interests, inadequate interference protections for public safety, the relatively limited number of public safety licensees, and therefore potential lessors, in the band. These

commenters point to the alleged complexity and logistical concerns involved in devising a spectrum leasing system in the 4.9 GHz band. Some commenters also suggest that public safety entities might engage in spectrum warehousing and “arbitrage,” whereby they would obtain or use their spectrum rights (received at no cost) to obtain leasing revenues.

18. We find that these concerns do not outweigh the public interest benefits of permitting leasing pursuant to the framework we adopt in this document. Although there are relatively few licensees in this band as compared to the overall number of public safety entities eligible to obtain a license, nearly all states have at least one statewide license, enabling leasing of nearly all available spectrum. And while a spectrum leasing framework involving shared spectrum may raise some complexities, so does every other proposed path to increase use of this band, and we believe that the framework we adopt in this document empowers states to find ways to enable public safety and non-public safety use of the band as best suits their particular needs. We emphasize that leasing is voluntary and allows state governments the flexibility to determine the appropriate use of this band in their respective jurisdictions, which may include new partnerships that could expand public safety access to the band. We expect this new flexibility will lead to new uses of 4.9 GHz spectrum and lower equipment costs for public safety. Also, the Commission is in no way redesignating or transferring 4.9 GHz spectrum for commercial use or requiring public safety to relinquish spectrum, thereby protecting existing public safety operations and investments. We anticipate that allowing non-public safety access through state-level leasing will also ensure continued cooperation amongst stakeholders, as public safety licensees today already are accustomed to coordinating shared spectrum use in their jurisdictions. Further, as the Commission noted in the Sixth FNPRM, statutory concerns regarding commercial use of public safety spectrum do not apply to the 4.9 GHz band, and no

commenter raised statutory concerns regarding spectrum leasing proposed in the Sixth FNPRM.

19. In the original Secondary Markets proceeding, the Commission considered and rejected spectrum warehousing concerns as related to public safety entities, noting that leasing of unused spectrum in fact diminishes the risk of spectrum warehousing. We find that the current freeze on applications for new or modified licenses should discourage speculative behavior, and our framework, which only allows leasing by a single state entity per state, will also reduce incentives to hold or obtain licenses for purposes other than active deployment. Further, the new licensing and coordination/management regime proposed in the accompanying Seventh FNPRM would further streamline the licensing of this band and avoid incentives for licensees to engage in speculative behavior.

## **B. Leasing Opportunities for States**

### **1. Spectrum Leasing by States**

20. Under the framework we adopt in this document, one entity in each state (the State Lessor) will have the opportunity to lease voluntarily some or all of its 4.9 GHz band spectrum rights to third parties for fixed or mobile use, including for non-public safety operations. Leasing by other 4.9 GHz band licensees, including by state entities other than the State Lessor, county or local entities, or nongovernmental organizations that operate in support of public safety, will not be permitted. The State Lessor and lessee(s) will have the flexibility to structure their lease arrangements, within the boundaries of our Secondary Markets rules, to protect ongoing and future public safety operations while allowing for more flexible use of the band. We recognize that State Lessors and lessees are best positioned to negotiate appropriate leasing arrangements to meet their operational needs, and the needs of their states, and we impose minimal restrictions on those agreements.

**a. Allowing Leasing by State Lessors**

21. We amend part 90, subpart Y, of our rules to permit the statewide licensee selected as the State Lessor to voluntarily lease 4.9 GHz band spectrum rights under our part 1 leasing rules to any entity that is otherwise eligible to be a spectrum lessee for fixed or mobile use, including to commercial entities and others with non-public safety operations, thus opening the band to flexible new uses. The State Lessor is also free to lease to public safety entities. Some commenters urge the Commission to provide for continued exclusive public safety community use of 4.9 GHz spectrum to be managed through the First Responders Network Authority (FirstNet); wireless providers other than AT&T (which operates FirstNet) urge the Commission to reject such an approach. We decline to assign the 4.9 GHz band to FirstNet—which would deprive states (as well as public safety entities within that state) any choice in how the band is used. We find, however, that the leasing framework we adopt in this document is not inconsistent with 4.9 GHz spectrum being used by FirstNet as a lessee; a State Lessor has the flexibility to enter into a variety of leasing arrangements, including leasing to commercial entities that have the option of providing services to public safety or non-public safety entities. As discussed below, the State Lessor also will no longer be subject to the public safety use restriction contained in our rules. Through this action, the State Lessor will be permitted to lease spectrum rights in all, or any portion, of that state. It may divide these rights on a geographic, spectral, or temporal basis, and it may also lease spectrum rights associated with its permanent fixed sites, including those with primary status under our rules.

22. State Lessors may enter into agreements with lessees to share equipment or other deployment costs provided that they comply with all relevant license provisions. We encourage parties to also consider alternative coordination methods to prevent harmful interference between

lessees and public safety licensees that allow for robust shared use of the band. For example, parties might consider spectrum leases that rely on dynamic sharing mechanisms, which permit operational access based on automated databases that identify protected operations. In the Seventh FNPRM, we seek comment on ways the Commission can encourage and facilitate this type of sharing.

**b. Leasing Limited to States the Do Not Divert 911 Fees at this Time**

23. The Commission originally designated the 4.9 GHz band for public safety use to “ensure that agencies involved in the protection of life and property possess the communications resources needed to successfully carry out their mission.” As the history of this proceeding well demonstrates, access to spectrum is not the sole determinant of whether public safety entities can obtain necessary communications services. Another issue that has challenged public safety entities is 911 fee diversion. The Commission is required to provide an annual report to Congress on state 911 fee collection and use that identifies which states have improperly diverted 911 fees. While identifying states that divert 911 fees in these reports has arguably helped discourage the practice, this step alone has failed to eliminate it. In the recently adopted Fee Diversion NOI, we found that between 2012 and 2018, American states and jurisdictions have diverted over \$1.275 billion in fees collected for 911 and Enhanced 911 services to non-911 purposes. As noted in the Fee Diversion NOI, “[t]his diversion of funding directly undermines the public safety communications system.” The Commission seeks specific comment in the Fee Diversion NOI on “regulatory steps the Commission could take to discourage fee diversion, such as . . . conditioning state and local eligibility for FCC licenses, programs, or other benefits on the absence of fee diversion.”

24. In this document, we expand access to the 4.9 GHz band by affording to certain eligible states the benefit of leasing spectrum rights, which we anticipate could provide substantial additional state revenues. However, we find it in the public interest to only extend this benefit to states that use 911 fees collected from consumers for their intended purpose at this time. Specifically, we will only permit states that are not identified in the Commission's December 2019 911 Fee Report as diverting 911 fees for non-911 purposes to lease spectrum rights to non-public safety or public safety entities. We take this action, in conjunction with our more in depth consideration of this issue in the Fee Diversion NOI, as an affirmative step toward addressing this long standing problem and in recognition that states that have a history of appropriately using 911 fees are more likely to respect the rights of public safety incumbents in the 4.9 GHz band. We defer consideration to the Seventh FNPRM on whether to extend the 4.9 GHz band leasing framework to states that divert 911 fees. A state that either believes it was incorrectly identified in the 2019 Fee Report as diverting fees, or that has taken subsequent remedial action, may petition the Public Safety and Homeland Security Bureau to demonstrate, with supporting documentation, that relief is justified, and we direct the Bureau to expedite action on any such petition.

**c. Selection of the State Lessor**

25. In order to centralize leasing functions and facilitate coordination of spectrum use, we require a state seeking to benefit from our voluntary secondary markets opportunities to select a single state entity that is a statewide 4.9 GHz band licensee to act as the State Lessor. Where a state has a single statewide license, we will treat that licensee as the default State Lessor. A default State Lessor may, in its discretion, assign its license to another statewide entity if that entity is deemed a more appropriate State Lessor; the assignment application must

include a designation letter from the governor (or his or her designee) akin to that required by § 90.529 of our rules certifying that the assignee is the entity the state has selected to be the State Lessor.

26. If a state has multiple statewide licenses held by state entities and voluntarily seeks to lease, the state must select one of those entities as the State Lessor. A statewide licensee not selected as State Lessor may continue to operate pursuant to its authorization but will not be permitted to lease spectrum rights. As part of any lease arrangement with a lessee, a State Lessor must submit to the Commission FCC Form 608 accompanied by evidence that it has been selected as State Lessor. Such evidence shall consist of a copy of the written agreement signed by each of the state's multiple statewide licensees indicating the selection of the State Lessor. If states with multiple statewide licensees are unable to reach such an agreement, we will accept in the alternative (as an attachment to FCC Form 608) a gubernatorial letter designating a certain state entity licensee as the State Lessor. To reduce administrative and regulatory burdens, we find it unnecessary to mandate a Commission pre-approval process for a state entity seeking State Lessor status prior to actually engaging in lease arrangements. We anticipate that, under this market-based approach, a prospective lessee engaged in negotiations with a prospective State Lessor will seek assurances that the requisite State Lessor documentation (either a multi-licensee agreement or a gubernatorial letter) has been executed prior to submission of an FCC Form 608 seeking Commission approval of, or provide notice to the Commission of, a specific lease arrangement, as applicable. Pursuant to our state-based approach to expanding secondary markets opportunities in the 4.9 GHz band, leasing will not be permitted in those states that have no statewide licensee.

**d. Application of the Secondary Markets Framework to State**

## **Lessors**

27. The Commission's Secondary Markets framework provides for a variety of leasing vehicles, any of which the State Lessor and its lessee(s) will be free to enter into depending on which best accommodates the needs of their state. This includes de facto transfer spectrum leasing arrangements, where the licensee retains de jure control of the license while de facto control of the leased spectrum is transferred to the spectrum lessee; and spectrum manager leasing arrangements, where the lessee is permitted to use the spectrum, but the licensee retains both de jure and de facto control. In determining the appropriate leasing vehicle, we expect a State Lessor to evaluate its ability as lessor to comply with state law requirements related to leasing activities. The State Lessor should only enter into lease arrangements that it is legally and organizationally equipped to implement.

28. Consistent with our Secondary Markets rules, State Lessors entering into spectrum lease agreements must comply with our existing part 1 leasing rules, including: Filing an FCC Form 608, either seeking prior Commission approval to enter into the lease (for a de facto transfer spectrum lease) or providing notice of the lease (for spectrum manager leases); Complying with the requirements associated with the chosen type of leasing agreement, including the level of control required to be maintained by the State Lessor for either a de facto transfer spectrum lease or a spectrum manager lease; Fulfilling all obligations associated with compliance with the Communications Act and Commission rules associated with the original license; Complying with our rules on assignments and transfers of control for spectrum leasing arrangements in the 4.9 GHz band; and Ensuring that spectrum leasing arrangements include all required contractual provisions.

29. We also note that certain licensees have a waiver of the prohibition on

aeronautical use in the 4.9 GHz band. If a State Lessor has been granted a waiver of the § 90.1205(c) aeronautical prohibition, that right is not transferable to a lessee. A lessee seeking to engage in aeronautical mobile operations must submit a request for waiver accompanied by a sufficient technical justification and an exhibit demonstrating the State Lessor's support for the waiver.

## **2. Rights and Responsibilities of Lessees**

30. To increase flexibility and encourage more efficient use of the 4.9 GHz band, lessees of 4.9 GHz band spectrum will not be subject to the requirement that they use the spectrum in support of public safety and may engage in flexible use fixed or mobile operations.

31. Lessees will be permitted to conduct any type of operation, including commercial, CII, or those in support of public safety. Lessees of a geographic area will be permitted to construct base stations and engage in mobile operations, and to construct temporary fixed sites within the lease area as permitted by the lease agreement as if they were a 4.9 GHz band licensee. They will not, however, have the authority to add stations/sites that are required to be individually licensed by our rules. These include permanent fixed sites and base stations that must be individually licensed due to their location. In the event a lessee's operations require individual site licensing under § 90.1207, the State Lessor will be required to file for a license and then lease the licensed site to the lessee.

32. The informal coordination requirements of § 90.1209(b) will apply to lessees in the same way as licensees. Accordingly, lessees have the obligation to cooperate with other operators in and around their area of operations in the selection and use of channels in order to reduce interference and make the most efficient use of the band in the same manner as licensees. Our rules require cooperation in the resolution of harmful interference to the mutual satisfaction

of operators, including lessees, and they also preserve the authority of the Commission to impose operational restrictions to resolve interference. Lessees also must adjust operations to prevent, or resolve, interference to any fixed links with primary status.

33. Lessees, like a State Lessor, will be required to comply with all relevant provisions of our Secondary Markets rules, including, for example, our subleasing rules if the lease agreement permits such subleasing. They also will be required to comply with any other requirements applicable to their operations, such as those under part 9 of our rules, whereby commercial mobile radio service (CMRS) providers and other relevant entities remain responsible for compliance with 9-1-1 and Enhanced 9-1-1 obligations, if applicable.

### **3. 4.9 GHz Incumbent Licensee Rights**

34. We clarify that the adoption of the Sixth Report and Order does not modify the rights of an incumbent 4.9 GHz band licensee other than a licensee selected to be a State Lessor. An incumbent is a 4.9 GHz licensee with an active license as reflected in ULS as of the adoption of the Freeze Public Notice, or a 4.9 GHz licensee granted an authorization pursuant to a waiver of, or modification of, the freeze. An incumbent licensee, whether a public safety agency or a nongovernmental organization, may continue to operate existing system(s) or make additional deployments pursuant to the terms of its license, consistent with our rules and the Freeze Public Notice. Incumbents must work with lessees to prevent and resolve harmful interference through cooperation in the same way they do today with other 4.9 GHz licensees, and a State Lessor and its lessee(s) also must work with incumbents to prevent and resolve harmful interference. The Commission retains the authority to impose operational conditions as needed in the event this cooperation fails to resolve interference concerns, whether between licensees, licensees and lessees, or lessees themselves.

### **C. Elimination of the Public Safety Use Restrictions for State Lessors**

35. This action expands access to the 4.9 GHz band through a revised leasing framework. To further increase flexibility in the use of valuable spectrum and to incentivize secondary markets activity in this band, we revise our rules to eliminate the requirement that a State Lessor licensee only use its 4.9 GHz band spectrum for public safety purposes. In the Sixth FNPRM, the Commission sought comment on a range of potential approaches to expanding use of the band in addition to leasing. For example, if critical infrastructure industries were permitted access as 4.9 GHz licensees, the Commission sought comment on whether they should be required to provide public safety services or be able to use the spectrum for any purpose. Noting that 4.9 GHz spectrum has been underutilized, the Commission specifically sought comment on redesignating the 4.9 GHz band, wholly or partially, to support commercial wireless use. The Commission asked whether the public interest would be “best served if this spectrum could be used for commercial applications, such as 5G...” and how to divide the band between public safety and commercial use if only a portion of the band were to be redesignated. The Commission also sought comment on “any other alternatives to support commercial wireless use of the 4.9 GHz band.”

36. We believe that modifying a State Lessor’s rights to permit non-public safety use is an alternative approach that promotes efficient spectrum use, incentivizes leasing activity, and is consistent with our action in this document allowing a State Lessor to lease spectrum for non-public safety purposes. Permitting a State Lessor to engage in non-public safety uses will more fully empower each state to determine the highest and best use for the 4.9 GHz band in its jurisdiction and to consider a wider range of spectrum use options that best accommodate its citizens’ communications needs, whether through its own operations or through those of third

party lessees. A State Lessor will also have the flexibility to determine whether to only conduct public safety operations under its license, or not allow non-public safety use through leasing. We anticipate, however, that centralized state-based control of non-public safety use will incentivize secondary markets activity and encourage greater spectrum use, and we explore a more expanded state-based model for the 4.9 GHz band in the accompanying Seventh FNPRM. We clarify that State Lessors that opt to operate as a CMRS provider will be regulated as such and will be subject to all relevant rules applicable to that type of service, including part 9 of our rules, regarding responsibility for compliance with 9-1-1 and Enhanced 9-1-1 obligations. Further, in the event that a 4.9 GHz band licensee other than a State Lessor seeks the flexibility to engage in non-public safety operations, it will be required to lease the necessary spectrum rights from the State Lessor in its jurisdiction.

**D. Authority to Allow Flexible-Use and Leasing in the 4.9 GHz Band**

37. Section 301 of the Communications Act, as amended, requires grant of a license to authorize use of radio transmissions, but specifies that a grant shall not be construed to create "any right beyond the terms, conditions, and periods of the license." Under our current 4.9 GHz band rules, all operations in the band must be in support of public safety. Under the new 4.9 GHz band leasing regime we adopt in this document, we eliminate this restriction for a State Lessor and for that entity's lessee(s). The terms and conditions for that 4.9 GHz licensee's authorization, based on the revised rules, will now include the right to engage in operations other than those in support of public safety and to lease to entities that are not required to conduct or support public safety operations. We find that permitting more flexible spectrum use in the underused 4.9 GHz band is consistent with our broad authority to license spectrum rights under the Communications Act and to define the terms of spectrum licenses by prescribing the

circumstances in which certain uses are permitted or prohibited, both by licensees and by lessees.

**E. Alternative Approaches from the Sixth FNPRM**

38. We determine that allowing spectrum leasing to non-public safety entities through negotiated agreements between a State Lessor and lessees has potential to significantly increase efficient use of the 4.9 GHz band in the near term, compared with alternative approaches upon which the Commission sought comment. In the Sixth FNPRM, we sought comment not only on spectrum leasing, but also on several alternative approaches to stimulate expanded use of, and investment in, the band. These included: (i) the expansion of licensee eligibility; (ii) a two-tiered sharing structure; (iii) a revised band plan, including reserving certain channels for aeronautical mobile and robotic use; (iv) more formal coordination requirements and regional planning coordinator (RPC) plans; and (v) new technical rules. We find that the proposed alternative approaches are less likely to increase the efficient use of spectrum in the band as compared with the approach we adopt in this Sixth Report and Order. The adopted approach effectively protects public safety interests while allowing state public safety entities to control commercial access. We defer consideration of certain other proposals explored in the Sixth FNPRM that are not precluded by expanded leasing, including whether to permit aeronautical and robotic use, to the accompanying Seventh FNPRM.

39. Expanding Eligibility to CII. We decline to expand eligibility for obtaining licenses in the band to include CII entities or to restrict lessee eligibility to CII entities. Limiting non-public safety use to one industry, or otherwise restricting non-public safety eligibility, would both significantly reduce opportunities to expand investment in the band. This approach would be contrary to the Commission's longstanding policy of promoting flexible licensing to ensure the most efficient use of spectrum. Such a limitation also would be contrary to our statutory

mandates to promote economic opportunity and competition, and the efficient and intensive use of electromagnetic spectrum. We agree with commenters who contend that CII has a demonstrated need for increased access to reliable broadband services to promote smart grid technologies and fast, secure communications networks, and we address this need by removing the requirement that 4.9 GHz spectrum must be used for public safety support operations as it applies to lessees. We fully encourage CII and other non-public safety and commercial entities to pursue 4.9 GHz secondary market opportunities through the framework we establish in this document.

40. Redesignation of the Band. The Commission sought comment in the Sixth FNPRM on whether to redesignate the 4.9 GHz band, wholly or partially, for commercial use, on a licensed or unlicensed basis. We decline to adopt this change because it would provide less protection for public safety use than would our decision to provide for expanded spectrum access through the secondary market while retaining public safety operations in the band. Given the interest in this band by both commercial and non-commercial users, we believe that our leasing framework achieves the right balance between commercial and non-commercial access; with minimal disruption to existing public safety operations in the band; it permits states, working in coordination with their public safety entities, to determine in the first instance the amount of spectrum needed for those public safety operations. While several commenters note the continued need for spectrum to support public safety operations, most commenters recognize the need to allow non-public safety operations in the band to maximize use of this spectrum. At the same time, commenters overwhelmingly oppose giving non-public safety entities access by redesignating the band for commercial use.

41. Two-tiered Sharing on a Secondary Basis. The Sixth FNPRM sought comment

on two-tiered sharing as an alternative approach for increasing use of the 4.9 GHz band. Under two-tiered sharing, “Tier 1 would consist of primary licensees in the band (including all incumbent users), while Tier 2 would allow other non-public safety users to access the band on a secondary basis, with safeguards to ensure priority and interference protection for Tier 1 operations.” The majority of commenters, citing technical barriers to adequately protecting public safety operations, oppose two-tiered sharing. Commenters that support two-tiered sharing stated that it would “encourage a more robust market for equipment and greater innovation, while protecting primary public safety users from harmful interference.” We find, however, that a state-based leasing framework we adopt in this document more effectively achieves the twin goals of making valuable mid-band spectrum available for flexible use and continuing to support public safety operations. Although we adopt leasing in the 4.9 GHz band rather than two-tiered sharing, we seek comment in the accompanying Seventh FNPRM on future use of dynamic sharing in this band and how such systems can further promote the adopted leasing regime.

42. Coordination and Regional Planning. In the Sixth FNPRM, the Commission proposed to require certified frequency coordination for licensing in the 4.9 GHz band. The Commission also sought comment on expanding the data contained in the Universal Licensing System to include more information than site licensing in order to facilitate this coordination. In addition, the Commission also sought comment on ways to increase the flexibility of Regional Planning Committees in facilitating use of the 4.9 GHz band.

43. The frequency coordination proposal described in the Sixth FNPRM is no longer relevant under the new leasing regime, which will allow licensees to continue to coordinate amongst themselves, and with new lessees, to ensure the most efficient use of the band and to mitigate harmful interference. We note that, while the record supports these proposals generally,

stakeholders did not address the specific need for reliance on frequency coordinators, increased data, or Regional Planning Committees under a leasing framework.

44. Given the secondary market approach we adopt in this document, we decline to mandate use of frequency coordinators in the 4.9 GHz band application process, modify the rules regarding regional plans, or otherwise require additional filings with the Commission regarding the type and quantity of 4.9 GHz band deployments. We do, however, seek comment in the accompanying Seventh FNPRM on ways to encourage cross-jurisdictional coordination of 4.9 GHz band spectrum leasing, particularly in the context of the model for a State Band Manager to coordinate public safety operations alongside lessee operations on which we seek comment. As part of this proposal, we also seek comment on alternate means of maintaining easily accessible records of deployments as the nature of licensing in the 4.9 GHz band evolves.

45. Technical Rule Changes. In the Sixth FNPRM, the Commission proposed or sought comment on a series of changes to our technical rules intended to facilitate sharing between public safety licensees, including: (1) modifying the channelization plan and bandwidth aggregation rules; (2) designating particular channels for aeronautical mobile and robotic use; (3) adopting technical standards for equipment; (4) rules governing the use of point-to-multipoint systems; and (5) power limits and polarization requirements on point-to-point systems. Commenters disagreed on these technical changes. Some commenters noted that the potential changes conflicted in certain cases, and commenters differed on which changes offered the most promise for preventing interference and promoting greater use of the band. We decline to adopt these changes, as they have the potential to limit licensee and lessee flexibility in designing leasing arrangements best suited for their operations, and they could undermine the benefits of the state-based leasing regime for both public safety and non-public safety users of the band. We

also find that these rule changes would not sufficiently increase use of the 4.9 GHz band or further our goal of encouraging robust secondary market activity. As stated, the leasing regime we adopt in this document provides states the flexibility, within the current technical rules, to reach voluntary agreements that will not only expand access to the band, but also provide for mutually adequate protections for State Lessors and their lessee(s).

46. Public Safety Priority. In the Sixth FNPRM, the Commission sought comment on how best to ensure that, if so desired, public safety entities would retain priority access to 4.9 GHz spectrum in a commercial leasing framework. The Commission also sought comment on whether non-public safety entities that lease spectrum capacity should have primary status because they entered into agreements with specific public safety licensees. We received no specific comments addressing this issue in the context of the leasing framework we adopt in this document, though one commenter expresses concern regarding a State Lessor making determinations as to the scope of public safety priority access. Through this action, we increase a state's flexibility to determine the scope of any operational needs, and we therefore decline to mandate public safety priority access to the band or provide primary status to non-public safety lessees. The leasing regime we adopt relies on coordination among licensees and lessees and permits each state to determine the extent to which priority access is a critical component of its vision for the band's use in its state; we empower each State Lessor to decide whether to include public safety priority provisions in any lease arrangement based on its judgment regarding the best use of the 4.9 GHz band. States will act on behalf of their subordinate public safety entities and may choose to require priority access protections, enforceable through contractual lease provisions, or they may determine that such priority is unnecessary for their state. State Lessors that are unable to come to satisfactory terms on this issue may decline to lease, without

unnecessary Commission involvement.

#### **F. Bureau Modification of Application Freeze**

47. Pursuant to the Bureaus' September 8, 2020 freeze, no new or modified applications for 4.9 GHz band licenses are currently being accepted or processed. This includes applications to license permanent fixed sites (i.e., those in place for one year or longer). In order to facilitate effective use of the band—both by public safety licensees and by non-public safety lessees—pending resolution of the issues raised below in the accompanying Seventh FNPRM, we direct the Bureaus to make modifications to the freeze by Public Notice, following the effective date of this Sixth Report and Order, to permit the acceptance and processing of certain applications. Specifically, we direct the Bureaus to modify the current freeze to permit the filing of applications for a statewide license from a single entity per state in a state that does not have a statewide licensee at the time of the freeze, provided that entity is also designated by the state as the State Lessor. Further, in order to not complicate the landscape of this band and reduce the flexibility that states have in determining the highest and best use of the spectrum, we direct the Bureaus to modify the current freeze to accept and process applications for permanent fixed site licenses only if filed by a State Lessor. If a public safety licensee other than a State Lessor seeks authority to construct and operate a new permanent fixed site, it may lease from a State Lessor provided that the State Lessor has a license for that facility.

#### **IV. FINAL REGULATORY FLEXIBILITY ANALYSIS**

##### **A. Need for, and Objectives of, the Final Rules**

48. The Sixth Report & Order continues the Commission efforts to expand access to mid-band spectrum by opening the band for flexible use via the secondary market while continuing to ensure access for public safety operations. The history of this band indicates that

public safety operations do not require exclusive access to the entire 50 megahertz of spectrum and can safely share this band with other operations. The actions we take in this document allow one statewide licensee of the 4.9 GHz (4940-4990 MHz) band in each state (the State Lessor) to lease some or all of their spectrum rights to third parties that are otherwise eligible to be a spectrum lessee for fixed or mobile use, including to commercial entities, and eliminates the requirement that, when leased or used by the State Lessor, the spectrum must be used to support public safety. We only permit states that are not identified in the Commission's December 2019 911 Fee Report as diverting 911 fees for non-911 purposes to lease spectrum rights to non-public safety or public safety entities. We anticipate that unrestricted secondary market transactions and non-public safety use will encourage greater development of equipment for this band, driving down costs and making it easier for public safety and non-public safety entities alike to deploy operations. Furthermore, making available mid-band spectrum for commercial use is critical in ensuring U.S. leadership in 5G and in helping to close the digital divide.

**B. Summary of Significant Issues Raised by Public Comments in Response to the IRFA**

49. There were no comments filed that specifically addressed the proposed rules and policies presented in the IRFA.

**C. Response to Comments by Chief Counsel for Advocacy of the Small Business Administration**

50. Pursuant to the Small Business Jobs Act of 2010, which amended the RFA, the Commission is required to respond to any comments filed by the Chief Counsel for Advocacy of the Small Business Administration (SBA), and to provide a detailed statement of any change made to the proposed rules as a result of those comments.

51. The Chief Counsel did not file any comments in response to the proposed rules in this proceeding.

**D. Description and Estimate of the Number of Small Entities to Which the Rules Will Apply**

52. The RFA directs agencies to provide a description of, and where feasible, an estimate of the number of small entities that may be affected by the rules adopted herein. The RFA generally defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.” In addition, the term “small business” has the same meaning as the term “small business concern” under the Small Business Act. A “small business concern” is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).

53. Small Business, Small Organizations, Small Governmental Jurisdictions. Our actions, over time, may affect small entities that are not easily categorized at present. We therefore describe here, at the outset, three broad groups of small entities that could be directly affected herein. First, while there are industry specific size standards for small businesses that are used in the regulatory flexibility analysis, according to data from the SBA’s Office of Advocacy, in general a small business is an independent business having fewer than 500 employees. These types of small businesses represent 99.9% of all businesses in the United States which translates to 30.7 million businesses.

54. Next, the type of small entity described as a “small organization” is generally “any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.” The Internal Revenue Service (IRS) uses a revenue benchmark of \$50,000 or less to

delineate its annual electronic filing requirements for small exempt organizations. Nationwide, for tax year 2018, there were approximately 571,709 small exempt organizations in the U.S. reporting revenues of \$50,000 or less according to the registration and tax data for exempt organizations available from the IRS.

55. Finally, the small entity described as a “small governmental jurisdiction” is defined generally as “governments of cities, counties, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand.” U.S. Census Bureau data from the 2017 Census of Governments indicate that there were 90,075 local governmental jurisdictions consisting of general purpose governments and special purpose governments in the United States. Of this number there were 36,931 general purpose governments (county, municipal and town or township) with populations of less than 50,000 and 12,040 special purpose governments - independent school districts with enrollment populations of less than 50,000. Accordingly, based on the 2017 U.S. Census of Governments data, we estimate that at least 48,971 entities fall into the category of “small governmental jurisdictions.”

56. Private Land Mobile Radio Licensees. Private land mobile radio (PLMR) systems serve an essential role in a vast range of industrial, business, land transportation, and public safety activities. Companies of all sizes operating in all U.S. business categories use these radios. Because of the vast array of PLMR users, the Commission has not developed a small business size standard specifically applicable to PLMR users. The closest applicable SBA category is Wireless Telecommunications Carriers (except Satellite) which encompasses business entities engaged in radiotelephone communications. The appropriate size standard for this category under SBA rules is that such a business is small if it has 1,500 or fewer employees. For this industry, U.S. Census Bureau data for 2012 shows that there were 967 firms that

operated for the entire year. Of this total, 955 firms had employment of 999 or fewer employees and 12 had employment of 1000 employees or more. Thus under this category and the associated size standard, the Commission estimates that the majority of PLMR licensees are small entities.

57. According to the Commission's records, a total of approximately 269,953 licenses comprise PLMR users. Of this number, there are a total of 3,578 PLMR licenses in the 4.9 GHz band. The Commission does not require PLMR licensees to disclose information about number of employees, and does not have information that could be used to determine how many PLMR licensees constitute small entities under this definition. The Commission however believes that a substantial number of PLMR licensees may be small entities despite the lack of specific information.

58. Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing. This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment. The SBA has established a size standard for this industry of 1,250 employees or less. U.S. Census Bureau data for 2012 show that 841 establishments operated in this industry in that year. Of that number, 828 establishments operated with fewer than 1,000 employees, 7 establishments operated with between 1,000 and 2,499 employees and 6 establishments operated with 2,500 or more employees. Based on this data, we conclude that a majority of manufacturers in this industry are small.

59. Wireless Telecommunications Carriers (except Satellite). This industry comprises establishments engaged in operating and maintaining switching and transmission facilities to provide communications via the airwaves. Establishments in this industry have spectrum licenses and provide services using that spectrum, such as cellular services, paging services, wireless internet access, and wireless video services. The appropriate size standard under SBA rules is that such a business is small if it has 1,500 or fewer employees. For this industry, U.S. Census Bureau data for 2012 show that there were 967 firms that operated for the entire year. Of this total, 955 firms employed fewer than 1,000 employees and 12 firms employed 1,000 employees or more. Thus under this category and the associated size standard, the Commission estimates that the majority of Wireless Telecommunications Carriers (except Satellite) are small entities.

60. The Commission's own data—available in its Universal Licensing System—indicate that, as of August 31, 2018 there are 265 Cellular licensees that will be affected by our actions. The Commission does not know how many of these licensees are small, as the Commission does not collect that information for these types of entities. Similarly, according to internally developed Commission data, 413 carriers reported that they were engaged in the provision of wireless telephony, including cellular service, Personal Communications Service (PCS), and Specialized Mobile Radio (SMR) Telephony services. Of this total, an estimated 261 have 1,500 or fewer employees, and 152 have more than 1,500 employees. Thus, using available data, we estimate that the majority of wireless firms can be considered small.

61. Frequency Coordinators. Neither the Commission nor the SBA has developed a small business size standard specifically applicable to spectrum frequency coordinators. The closest applicable SBA category is Business Associations which comprises establishments

primarily engaged in promoting the business interests of their members. The SBA has developed a small business size standard for “Business Associations,” which consists of all such firms with gross annual receipts of \$8 million or less. For this category, U.S. Census Bureau data for 2012 shows that there were 14,996 firms that operated for the entire year. Of these firms, a total of 14,229 had gross annual receipts of less than \$5 million and 396 firms had gross annual receipts of \$5 million to \$9,999,999.

62. There are 13 entities certified to perform frequency coordination functions under Part 90 of the Commission’s rules. According to U. S. Census Bureau data approximately 95% of business associations have gross annual receipts of \$8 million or less and would be classified as small entities. The Business Associations category is very broad however and does not include specific figures for firms that are engaged in frequency coordination. Thus, the Commission is unable to ascertain exactly how many of the frequency coordinators are classified as small entities under the SBA size standard. Therefore, for purposes of this FRFA under the associated SBA size standard, the Commission estimates that a majority of the 13 FCC-certified frequency coordinators are small.

**E. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements for Small Entities**

63. The new leasing opportunities created in the Sixth Report & Order will result in reporting, recordkeeping and compliance obligations for State Lessor licensees and lessees of 4.9 GHz band spectrum who elect to enter leasing arrangements for this spectrum. More specifically, a 4.9 GHz band State Lessor entering into leases will be required to file an FCC Form 608, either seeking prior Commission approval to enter into the lease for a de facto transfer spectrum lease or providing notice of the lease for spectrum manager leases. These requirements

are consistent with existing Commission Secondary Market rules. Where a state has multiple statewide licenses held by state entities and voluntarily seeks to lease, the state must select one of the licensees as the State Lessor. As part of any lease arrangement with a lessee, a State Lessor must submit to the Commission FCC Form 608 accompanied by evidence that it has been selected as State Lessor. Such evidence shall consist of a copy of the written agreement signed by each of the state's multiple statewide licensees indicating the selection of the State Lessor. If states with multiple statewide licensees are unable to reach such an agreement, we will accept in the alternative (as an attachment to FCC Form 608) a gubernatorial letter designating a certain state entity licensee as the State Lessor.

64. State Lessors will be required to comply with our Secondary Markets rules, in particular our existing part 1 leasing rules associated with entering into spectrum lease agreements which includes fulfilling all obligations associated with compliance with the Communications Act and Commission rules associated with the original license; complying with our rules on assignments and transfers of control for spectrum leasing arrangements in the 4.9 GHz band; and ensuring that spectrum leasing arrangements meet all requirements as to contractual provisions. Similarly, lessees will be required to comply with all relevant provisions of our Secondary Markets rules, including, for example, our subleasing rules if the lease agreement permits such subleasing. Lessees will also be required to comply with any other requirements applicable to their operations, such as those under part 9 of our rules, whereby commercial mobile radio service (CMRS) providers and other relevant entities remain responsible for compliance with 9-1-1 and Enhanced 9-1-1 obligations, if applicable. Additionally, lessees will be subject to compliance with the informal coordination requirements of section 90.1209(b) in the same way as licensees.

65. The Commission does not believe the rules adopted in the Sixth Report & Order will require small entities to hire attorneys, engineers, consultants, or other professionals in order to comply with the rule changes. Similarly, although the Commission cannot quantify the cost of compliance with the rule changes discussed herein, we do not believe that the costs and/or administrative requirements associated with any of the adopted rule changes will unduly burden small entities. Our actions to permit leasing of 4.9 GHz band spectrum by a statewide licensee is the fastest and most efficient way to drive interest and investment in the band. Moreover, we expect the absence of restrictions on lessee eligibility will open the band to new commercial and other non-public safety operation uses. We anticipate that allowing spectrum leasing opportunities in this band will ultimately decrease deployment barriers—such as high equipment costs—for both public safety licensees as well as new lessees in the 4.9 GHz band.

**F. Steps Taken to Minimize the Significant Economic Impact on Small Entities, and Significant Alternatives Considered**

66. The RFA requires an agency to describe any significant, specifically small business, alternatives that it has considered in reaching its approach, which may include the following four alternatives (among others): (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for such small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for such small entities.

67. The rules the Commission adopts should benefit small entities by giving them more options for gaining access to valuable wireless spectrum and increasing economic

opportunity. Our actions to open the 4.9 GHz band to the secondary market to permit leasing by a statewide licensee and not to limit lessee eligibility will allow participating small entities to avoid operational costs that may have otherwise ensued had we not taken this approach. Moreover, our actions may drive down the costs of compatible equipment and facilitate innovative cost-sharing arrangements between public safety licensees and non-public safety lessees both of which would benefit and minimize the economic impact for participating small entities. Similarly, small entities stand to benefit from our finding that limiting non-public safety use to one industry, or otherwise restricting non-public safety eligibility, would limit opportunities to grow significantly investment in the 4.9 GHz band. This determination is consistent with the Commission's longstanding policy of allowing flexible licensing to ensure the most efficient use of spectrum and our statutory mandates to promote economic opportunity and competition, and the efficient and intensive use of electromagnetic spectrum.

68. In the Sixth FNPRM, the Commission put forth a number of other proposals for consideration to stimulate expanded use of and investment in the 4.9 GHz band including: (i) a revised band plan, that included reserving certain channel for aeronautical mobile and robotic use; (ii) more formal coordination requirements; (iii) additional information collection and registration of the use of the band, that included new deployment reports and construction deadlines; (iv) new technical rules; and (v) additional regional planning. Given our decision to first permit broader use of the band through leasing, at this time we opted not to adopt any of these proposals and thereby minimize any additional economic impact on small entities that may have resulted from additional compliance requirements.

#### **G. Report to Congress**

69. The Commission will send a copy of the Sixth Report & Order, including this

FRFA, in a report to Congress pursuant to the Congressional Review Act. In addition, the Commission will send a copy of the Sixth Report & Order, including this FRFA, to the Chief Counsel for Advocacy of the SBA. A copy of the Sixth Report & Order, and FRFA (or summaries thereof) will also be published in the Federal Register.

## **V. ORDERING CLAUSES**

70. Accordingly, IT IS ORDERED that, pursuant to the authority found in sections 4(i), 302, 303(b), 303(f), 303(g), 303(r), and 405 of the Communications Act of 1934, as amended, 47 U.S.C. 154(i), 302a, 303(b), 303(f), 303(g), 303(r), and 405, this Sixth Report and Order IS HEREBY ADOPTED.

71. IT IS FURTHER ORDERED that the rules and requirements adopted herein WILL BECOME EFFECTIVE thirty (30) days after publication in the Federal Register, with the exception of § 90.1217. Section 90.1217 contains new or modified information collection requirements that require review by the Office of Management and Budget (OMB) under the Paperwork Reduction Act. The Commission directs the Wireless Telecommunications Bureau to announce the effective date of those information collections in a document published in the Federal Register after the Commission receives OMB approval, and directs the Wireless Telecommunications Bureau to cause § 90.1217 to be revised accordingly.

72. IT IS FURTHER ORDERED that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this Sixth Report and Order, including the Final Regulatory Flexibility Analysis and the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

73. IT IS FURTHER ORDERED that the Commission SHALL SEND a copy of this

Sixth Report and Order in a report to be sent to Congress and the Government Accountability Office pursuant to the Congressional Review Act, see 5 U.S.C. 801(a)(1)(A).

**List of Subjects in 47 CFR Parts 1 and 90**

Communications equipment, Organization and functions (Government agencies), Radio, Reporting and recordkeeping requirements, Telecommunications.

FEDERAL COMMUNICATIONS COMMISSION.

Marlene Dortch,  
Secretary,  
Office of the Secretary.

## Final Rules

For the reasons discussed in the preamble, the Federal Communications Commission amends 47 CFR parts 1 and 90 to read as follows:

### **PART 1 – PRACTICE AND PROCEDURE**

1. The authority citation for part 1 continues to read as follows:

Authority: 47 U.S.C. chs. 2, 5, 9, 13; 28 U.S.C. 2461, unless otherwise noted.

2. Effective [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER], revise § 1.9001 to read as follows:

#### **§ 1.9001 Purpose and scope.**

(a) The purpose of this subpart is to implement policies and rules pertaining to spectrum leasing arrangements between licensees in the services identified in this subpart and spectrum lessees. This subpart also implements policies for private commons arrangements. The policies and rules in this subpart also implicate other Commission rule parts, including parts 1, 2, 20, 22, 24, 25, 27, 30, 80, 90, 95, and 101 of title 47, chapter I of the Code of Federal Regulations.

(b) Except as provided in paragraph (c) of this section, licensees holding exclusive use rights are permitted to engage in spectrum leasing whether their operations are characterized as commercial, common carrier, private, or non-common carrier.

(c) A State Lessor licensee (as defined in § 90.1217 of this chapter) in the shared 4940-4990 MHz band (see part 90, subpart Y, of this chapter) is permitted to lease some or all of the spectrum rights under its license, except that a state identified as diverting 911 fees in the Commission's December 2019 911 Fee Report sent to Congress pursuant to 47 U.S.C. 615a-1(f)(2) shall not be permitted to lease 4.9 GHz spectrum.

3. Effective [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN

THE FEDERAL REGISTER], amend § 1.9005 by adding paragraph (oo) to read as follows:

**§ 1.9005 Included services.**

\* \* \* \* \*

(oo) The 4940-4990 MHz band (part 90 of this chapter).

4. Effective [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER], revise § 1.9048 to read as follows:

**§ 1.9048 Special provisions relating to spectrum leasing arrangements involving licensees in the Public Safety Radio Services.**

(a) Licensees in the Public Safety Radio Services (see part 90, subpart B, and § 90.311(a)(1)(i) of this chapter) may enter into spectrum leasing arrangements with other public safety entities eligible for such a license authorization as well as with entities providing communications in support of public safety operations (see § 90.523(b) of this chapter).

(b) In addition to spectrum leasing arrangements permitted under paragraph (a) of this section, a State Lessor (as defined in § 90.1217 of this chapter) in the 4940-4990 MHz band (see part 90, subpart Y, of this chapter) may enter into spectrum leasing arrangements with any entity eligible under this part to be a spectrum lessee, except that a state identified as diverting 911 fees in the Commission's December 2019 911 Fee Report sent to Congress pursuant to 47 U.S.C. 615a-1(f)(2) shall not be permitted to lease 4.9 GHz spectrum.

**PART 90 – PRIVATE LAND MOBILE RADIO SERVICES**

5. The authority citation for part 90 continues to read as follows:

Authority: 47 U.S.C. 154(i), 161, 303(g), 303(r), 332(c)(7), 1401-1473.

6. Effective [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN

THE FEDERAL REGISTER], revise § 90.1203 to read as follows:

**§ 90.1203 Eligibility.**

(a) Entities providing public safety services (as defined in § 90.523) are eligible to hold a Commission license for systems operating in the 4940-4990 MHz band. All of the requirements and conditions set forth in § 90.523 also govern authorizations in the 4940-4990 MHz band.

(b) 4.9 GHz band licensees may enter into sharing agreements or other arrangements for use of the spectrum with entities that do not meet the eligibility requirements in this section. However, all applications in the band are limited to operations in support of public safety, except as provided in paragraph (c) of this section.

(c) Operations conducted pursuant to a license held by a State Lessor (as defined in § 90.1217), whether conducted by the State Lessor or its lessee(s), are not limited to operations in support of public safety. For purposes of subpart X of part 1 of this chapter, such lessees shall be deemed eligible and qualified as a licensee, notwithstanding paragraph (a) of this section.

7. Delayed indefinitely, add § 90.1217 to read as follows:

**§ 90.1217 State Lessor.**

(a) The State Lessor shall have the authority to lease some or all of its 4.9 GHz band spectrum usage rights, including geographic areas licenses or permanent fixed sites individually licensed under § 90.1207, pursuant to subpart X of part 1 of this chapter, to any entity eligible to be a spectrum licensee under subpart X of part 1.

(b) In each state (as defined in § 90.7) one state entity holding a statewide license may be selected as a State Lessor.

(1) In states where there is only one state entity holding a statewide license, that licensee will be deemed the State Lessor.

(2) In states where there are multiple state entities holding a statewide license, one must be selected as the State Lessor if seeking to lease 4.9 GHz band spectrum use rights. This selection must be demonstrated through the inclusion of a letter, signed by all state entities holding a statewide license in that state, affirming the selection of a State Lessor for that state, in any application to the Commission that requires demonstration of State Lessor Status, including FCC Form 608. If states with multiple state entities holding a statewide license are unable to reach an agreement affirming a State Lessor selection, the Commission will accept in the alternative a letter, signed by the elected chief executive (Governor) of that state, or his or her designee, affirming the selection of a State Lessor for that state.

(c) The State Lessor may assign its license to another state entity eligible for a statewide license.

(1) Any assignment application must be accompanied by a letter, signed by the elected chief executive (Governor) of that state, or his or her designee, affirming the selection of the assignee as the State Lessor for that state.

(2) Any assignment of the State Lessor's license must include all permanent fixed site authorizations obtained while a State Lessor. A licensee selected as the State Lessor may only assign its entire license and may not partition or disaggregate its license.